

~~1000~~ 11-7-94  
O3c)

TEAM 8

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/699,716

DATE: 11/13/96  
TIME: 14:49:38

INPUT SET: SI3766.raw

This Raw Listing contains the General  
Information Section and up to the first 5 pages.

1 SEQUENCE LISTING  
2

3 (1) General Information:

4 (i) APPLICANT: David G. Heath

5 Arthur M. Friedlander

6 George W. Anderson

7 Susan L. Welkos

8

9 (ii) TITLE OF INVENTION: Recombinant F1-V Plague Vaccine

10

11 (iii) NUMBER OF SEQUENCES: 6

12

13 (iv) CORRESPONDENCE ADDRESS:

14 (A) ADDRESSEE: John Moran

15 (B) STREET: USA MRMC - MRMC-JA

16 (C) CITY: FORT DETRICK, FREDERICK

17 (D) STATE: MARYLAND

18 (E) COUNTRY: USA

19 (F) ZIP: 21702-5012

20

21 (v) COMPUTER READABLE FORM:

22 (A) MEDIUM TYPE: Floppy disk

23 (B) COMPUTER: Apple Macintosh

24 (C) OPERATING SYSTEM: Macintosh 7.5

25 (D) SOFTWARE: Microsoft Word 6.0

26

27 (vi) CURRENT APPLICATION DATA:

28 (A) APPLICATION NUMBER:

29 (B) FILING DATE:

30 (C) CLASSIFICATION:

31

32 (vii) PRIOR APPLICATION DATA:

33 (A) APPLICATION NUMBER:

34 (B) FILING DATE:

35

36 (viii) ATTORNEY/AGENT INFORMATION:

37 (A) NAME: Moran, John

38 (B) REGISTRATION NUMBER: 26,313

39 (C) REFERENCE/DOCKET NUMBER:

40

41 (ix) TELECOMMUNICATION INFORMATION

42 (A) TELEPHONE: (301) 619-2065

43 (B) TELEFAX: (301) 619-7714

44

45 (2) INFORMATION FOR SEQ ID NO:1:

46

ENTERED

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/699,716DATE: 11/13/96  
TIME: 14:49:41

INPUT SET: S13766.raw

47 (i) SEQUENCE CHARACTERISTICS:

48 (A) LENGTH: 1566 bp

49 (B) TYPE: Nucleic acid

50 (C) STRANDEDNESS: Single

51 (D) TOPOLOGY: Linear

52

53 (ii) SEQUENCE DESCRIPTION: SEQ ID NO:1:

54

55 ATGGGCCATC ATCATCATCA TCATCATCAT CATCACAGCA 40

56

57 GCGGCCATAT CGACGACGAC GACAAGCATA TGAAAAAAAT 80

58

59 CAGTTCCGTT ATCGCCATTG CATTATTTGG AACTATTGCA 120

60

61 ACTGCTAATG CGGCAGATTG AACTGCAAGC ACCACTGCAA 160

62

63 CGGCAACTCT TGTTGAACCA GCCCGCATCA CTCTTACATA 200

64

65 TAAGGAAGGC GCTCCAATTA CAATTATGGA CAATGGAAAC 240

66

67 ATCGATACAG AATTACTTGT TGGTACGCTT ACTCTTGGCG 280

68

69 GCTATAAAAC AGGAACCACT AGCACATCTG TTAACTTTAC 320

70

71 AGATGCCGCG GGTGATCCC A TGTACTTAAC ATTACTTCT 360

72

73 CAGGATGGAA ATAACCACCA ATTCACTACA AAAGTGATTG 400

74

75 GCAAGGATTC TAGAGATTTT GATATCTCTC CTAAGGTAAA 440

76

77 CGGTGAGAAC CTTGTGGGG ATGACGTCGT CTTGGCTACG 480

78

79 GGCAGCCAGG ATTTCTTGT TCGCTCAATT GGTTCCAAAG 520

80

81 GCGGTAAACT TGCAGCAGGT AAATACACTG ATGCTGTAAC 560

82

83 CGTAACCGTA TCTAACCAAG AATTCACTGAT TAGAGCCTAC 600

84

85 GAACAAAACC CACAACATTT TATTGAGGAT CTAGAAAAAG 640

86

87 TTAGGGTGGA ACAACTTACT GGTCTGGTT CTTCAGTTTT 680

88

89 AGAAGAATTG GTTCAGTTAG TCAAAGATAA AAATATAGAT 720

90

91 ATTTCCATTA AATATGATCC CAGAAAAGAT TCGGAGGTTT 760

92

93 TTGCCAATAG AGTAATTACT GATGATATCG AATTGCTCAA 800

94

95 GAAAATCCTA GCTTATTTC TACCCGAGGA TACCATTCTT 840

96

97 AAAGGCGGTC ATTATGACAA CCAACTGCAA AATGGCATCA 880

98

99 AGCGAGTAAA AGAGTTCCCTT GAATCATCGC CGAATACACA 920

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/699,716DATE: 11/13/96  
TIME: 14:49:44

INPUT SET: SI3766.raw

100					
101	ATGGGAATTG	CGGGCGTTCA	TGGCAGTAAT	GCATTTCTCT	960
102					
103	TTAACCGCCG	ATCGTATCGA	TGATGATATT	TTGAAAGTGA	1000
104					
105	TTGTTGATTC	AATGAATCAT	CATGGTGATG	CCCGTAGCAA	1040
106					
107	GTTGCGTGAA	GAATTAGCTG	AGCTTACCGC	CGAATTAAAG	1080
108					
109	ATTTATTCAAGC	TTATTCAAGC	CGAAATTAAT	AAGCATCTGT	1120
110					
111	CTAGTAGTGG	CACCATAAAT	ATCCATGATA	AATCCATTAA	1160
112					
113	TCTCATGGAT	AAAAATTAT	ATGGTTATAC	AGATGAAGAG	1200
114					
115	ATTTTTAAAG	CCAGCGCAGA	GTACAAAATT	CTCGAGAAAA	1240
116					
117	TGCCTCAAAC	CACCATTCAAG	GTGGATGGGA	GCGAGAAAAA	1280
118					
119	AATAGTCTCG	ATAAAGGACT	TTCTTGGAAAG	TGAGAATAAA	1320
120					
121	AGAACCGGGG	CGTTGGGTAA	TCTGAAAAAC	TCATACTCTT	1360
122					
123	ATAATAAAGA	TAATAATGAA	TTATCTCACT	TTGCCACCAC	1400
124					
125	CTGCTCGGAT	AAGTCCAGGC	CGCTCAACGA	CTTGGTTAGC	1440
126					
127	CAAAAAACAA	CTCAGCTGTC	TGATATTACA	TCACGTTTTA	1480
128					
129	ATTCAGCTAT	TGAAGCACTG	AACCGTTCA	TTCAGAAATA	1520
130					
131	TGATTCAAGTG	ATGCAACGTC	TGCTAGATGA	CACGTCTGGT	1560
132					
133	AAATGA				1566
134					
135					

136 (2) INFORMATION FOR SEQ ID NO:2:

137

138 (i) SEQUENCE CHARACTERISTICS:

139 (A) LENGTH: 521

140 (B) TYPE:Amino acid

141 (C) STRANDEDNESS: Single

142 (D) TOPOLOGY: Linear

143

144 (ii) SEQUENCE DESCRIPTION: SEQ ID NO:2:

145

146 Met Gly His His His His His His His His Ser Ser Gly

147 1 5 10 15

148

149 His Ile Asp Asp Asp Asp Lys His Met Lys Lys Ile Ser Ser Val

150 20 25 30

151

152 Ile Ala Ile Ala Leu Phe Gly Thr Ile Ala Thr Ala Asn Ala Ala

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/699,715DATE: 11/13/96  
TIME: 14:49:48

INPUT SET: SI3766.raw

153	35	40	45
154			
155	Asp Leu Thr Ala Ser Thr Thr Ala Thr Ala Thr Leu Val Glu Pro		
156	50	55	60
157			
158	Ala Arg Ile Thr Leu Thr Tyr Lys Glu Gly Ala Pro Ile Thr Ile		
159	65	70	75
160			
161	Met Asp Asn Gly Asn Ile Asp Thr Glu Leu Leu Val Gly Thr Leu		
162	80	85	90
163			
164	Thr Leu Gly Gly Tyr Lys Thr Gly Thr Thr Ser Thr Ser Val Asn		
165	95	100	105
166			
167	Phe Thr Asp Ala Ala Gly Asp Pro Met Tyr Leu Thr Phe Thr Ser		
168	110	115	120
169			
170	Gln Asp Gly Asn Asn His Gln Phe Thr Thr Lys Val Ile Gly Lys		
171	125	130	135
172			
173	Asp Ser Arg Asp Phe Asp Ile Ser Pro Lys Val Asn Gly Glu Asn		
174	140	145	150
175			
176	Leu Val Gly Asp Asp Val Val Leu Ala Thr Gly Ser Gln Asp Phe		
177	155	160	165
178			
179	Phe Val Arg Ser Ile Gly Ser Lys Gly Gly Lys Leu Ala Ala Gly		
180	170	175	180
181			
182	Lys Tyr Thr Asp Ala Val Thr Val Thr Val Ser Asn Gln Glu Phe		
183	185	190	195
184			
185	Met Ile Arg Ala Tyr Glu Gln Asn Pro Gln His Phe Ile Glu Asp		
186	200	205	210
187			
188	Leu Glu Lys Val Arg Val Glu Gln Leu Thr Gly His Gly Ser Ser		
189	215	220	225
190			
191	Val Leu Glu Glu Leu Val Gln Leu Val Lys Asp Lys Asn Ile Asp		
192	230	235	240
193			
194	Ile Ser Ile Lys Tyr Asp Pro Arg Lys Asp Ser Glu Val Phe Ala		
195	245	250	255
196			
197	Asn Arg Val Ile Thr Asp Asp Ile Glu Leu Leu Lys Lys Ile Leu		
198	260	265	270
199			
200	Ala Tyr Phe Leu Pro Glu Asp Thr Ile Leu Lys Gly Gly His Tyr		
201	275	280	285
202			
203	Asp Asn Gln Leu Gln Asn Gly Ile Lys Arg Val Lys Glu Phe Leu		
204	290	295	300
205			

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/699,716DATE: 11/13/96  
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INPUT SET: S13766.raw

206 Glu Ser Ser Pro Asn Thr Gln Trp Glu Leu Arg Ala Phe Met Ala  
207 305 310 315  
208  
209 Val Met His Phe Ser Leu Thr Ala Asp Arg Ile Asp Asp Asp Ile  
210 320 325 330  
211  
212 Leu Lys Val Ile Val Asp Ser Met Asn His His Gly Asp Ala Arg  
213 335 340 345  
214  
215 Ser Lys Leu Arg Glu Glu Leu Ala Glu Leu Thr Ala Glu Leu Lys  
216 350 355 360  
217  
218 Ile Tyr Ser Val Ile Gln Ala Glu Ile Asn Lys His Leu Ser Ser  
219 365 370 375  
220  
221 Ser Gly Thr Ile Asn Ile His Asp Lys Ser Ile Asn Leu Met Asp  
222 380 385 390  
223  
224 Lys Asn Leu Tyr Gly Tyr Thr Asp Glu Glu Ile Phe Lys Ala Ser  
225 395 400 405  
226  
227 Ala Glu Tyr Lys Ile Leu Glu Lys Met Pro Gln Thr Thr Ile Gln  
228 410 415 420  
229  
230 Val Asp Gly Ser Glu Lys Lys Ile Val Ser Ile Lys Asp Phe Leu  
231 425 430 435  
232  
233 Gly Ser Glu Asn Lys Arg Thr Gly Ala Leu Gly Asn Leu Lys Asn  
234 440 445 450  
235  
236 Ser Tyr Ser Tyr Asn Lys Asp Asn Asn Glu Leu Ser His Phe Ala  
237 455 460 465  
238  
239 Thr Thr Cys Ser Asp Lys Ser Arg Pro Leu Asn Asp Leu Val Ser  
240 470 475 480  
241  
242 Gln Lys Thr Thr Gln Leu Ser Asp Ile Thr Ser Arg Phe Asn Ser  
243 485 490 495  
244  
245 Ala Ile Glu Ala Leu Asn Arg Phe Ile Gln Lys Tyr Asp Ser Val  
246 500 505 510  
247  
248 Met Gln Arg Leu Leu Asp Asp Thr Ser Gly Lys  
249 515 520  
250  
251  
252 (2) INFORMATION FOR SEQ ID NO:3:  
253  
254 (i) SEQUENCE CHARACTERISTICS:  
255 (A) LENGTH: 28 bp  
256 (B) TYPE: Nucleic acid  
257 (C) STRANDEDNESS: Single  
258 (D) TOPOLOGY: Linear